Attachment A
VPDES Permit No. VA0004146
Summary of Changes to the Draft Permit
Published for Public Comment

Part I.A.2.a – Outfall 101

Loading limits for Total Suspended Solids (TSS) were developed to ensure consistency with the Federal Effluent Guidelines.

Further, the maximum concentration limit for TSS was reduced to reflect the wastewaters historically discharged to Outfall 004.

Part I.A.2.a.(7) – Outfall 101

The following footnote has been added:

"(7) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed in Part I.C.14.a.

If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

If the result of the total chromium analysis is detectable, both Chromium III and Chromium VI shall be reported as the number measured.

If the result of the total chromium analysis exceeds effluent limitations for Chromium III, Chromium VI, or both, the result shall be considered a violation of the respective limitations."

Part I.A.2.f – Outfall 101

The following footnote has been added:

"f. There shall be no discharge of bottom ash or fly ash transport wastewaters generated at this facility on or after November 1, 2018. On or after November 1, 2018, any bottom ash or fly ash transport wastewaters generated at this facility prior to that date shall be regarded as legacy wastewaters, which may be discharged in accordance with the above respective Part I.A. subpart requirements for this outfall."

Part I.A.3.d – Outfall 002

This section incorrectly referenced Outfall 001 instead of 002. This clerical error has been corrected and now reads:

"When Part I.A.2 is effective, process wastewater from internal Outfall 101 may be discharged through Outfall 002."

Part I.A.5.a – Outfall 301

Loading limits for ammonia were added to ensure compliance with the Richmond-Crater Water Quality Management Plan.

Parts I.A.6, I.A.7, I.A.8 – Outfalls 302, 303, 304

The words "the LVWWTS" have been replaced with "Outfall 301" in order to clarify that the effluent limitations in these sections become effective with the discharge from Outfall 301.

Part I.A.6.a – Outfall 302

Loading limits for TSS were developed to ensure consistency with the Federal Effluent Guidelines.

Part I.A.6.a.(3) – Outfall 302

The following footnote was added:

"(3) Limitation expressed in three significant figures and is applicable if combustion residual leachate is separately treated and discharged to Outfall 301."

Part I.A.6.a.(4) – Outfall 302

The following footnote was added:

"(4) Limitation expressed in three significant figures and is applicable if combustion residual leachate from the Fossil Fuel Combustion Product (FFCP) Management Facility is directed to the FGD WWTP for treatment and discharge through Outfall 302."

Part I.A.6.b – Outfall 302

Part I.A.6.b was removed and replaced by the aforementioned footnotes – (3) and (4) – of Part I.A.6.a.

Part I.A.9 – Outfall 305

In order to clarify that the effluent limitations of this Part become effective with the discharge from the Coal Pile Runoff Metals Treatment System, the words "Metals Treatment System" were included after "Coal Pile Runoff" and the following footnote was included:

"(2) Commencement of discharge does not include testing and commissioning of the Coal Pile Runoff Metals Treatment System. The permittee shall notify DEQ within 72 hours of the commencement of discharge of the Coal Pile Runoff Metals Treatment System."

Part I.A.10.a – Outfall 004

Loading limits for TSS were developed to ensure consistency with the Federal Effluent Guidelines.

Loading limits for ammonia were added to ensure compliance with the Richmond-Crater Water Quality Management Plan.

Part I.A.10.a.(5) – Outfall 004

The following footnote was added:

"(5)Effective date for loading limits is November 1, 2018."

Part I.A.10.d – Outfall 004

This footnote has been edited to clarify the contents of Part I.C.24 and now reads:

"d. See Part I.C.24 for discharge notification requirements and a definition of drawdown."

Part I.A.10.e – Outfall 004

The following footnote was added:

"e. There shall be no discharge of bottom ash or fly ash transport wastewaters generated at this facility on or after November 1, 2018. On or after November 1, 2018, any bottom ash or fly ash transport wastewaters generated at this facility prior to that date shall be regarded as legacy wastewaters, which may be discharged in accordance with the above respective Part I.A. subpart requirements for this outfall."

Parts I.A.11, I.A.11.b, I.A.12, I.A.12.b – Outfalls 401, 402

The words "the LVWWTS" have been replaced with "Outfall 301" in order to clarify that Outfalls 401 and 402 are redesignated as Outfalls 302 and 303, respectively, with the commencement of discharge from Outfall 301.

Part I.A.12.a – Outfall 402

Loading limits for TSS were developed to ensure consistency with the Federal Effluent Guidelines.

Part I.A.13.a – Outfall 005

Loading limits for TSS were developed to ensure consistency with the Federal Effluent Guidelines.

Part I.C.10.c – Low Level PCB Sampling for Internal Outfall 301

The deadline for submittal of a sampling plan was modified and now states:

"c. The sampling protocol shall be submitted to DEQ-Piedmont Regional Office for review and approval at least 30 days before the commencement of discharge from Outfall 301."

Part I.C.17.c – Whole Effluent Toxicity (WET) testing - Outfall 003

The word "Pre-LVWWTS" has been replaced with "Pre-Outfall 301" to clarify that the WET limits are effective prior to the discharge from Outfall 301.

Part I.C.17.d – Whole Effluent Toxicity (WET) testing - Outfall 003

The world "LVWWTS" has been replaced with "Outfall 301" to clarify that the WET limits are effective after the commencement of discharge from Outfall 301

Part I.C.17.g - Whole Effluent Toxicity (WET) testing reporting schedule

This section included a clerical error that has been corrected to clarify that the 1st Annual Monitoring Period begins October 1, 2016.

Part I.C.24 – Ash Pond Closure Discharge

This section has been edited to clarify that the 72-hour and 24-hour notification requirements are required prior to, and following, the initiation of the discharge of drawdown water from the Upper or Lower Ash Ponds and now reads:

"The permittee shall notify the DEQ Piedmont Regional Office at least 72 hours prior to the planned commencement of the discharge of drawdown water in the Upper or Lower Ash Ponds in preparation for pond closure. A second notification to the DEQ Piedmont Regional Office shall be provided within 24 hours after initiating the discharge of drawdown water from the Upper or Lower Ash Ponds. Closure activities as addressed in this permit shall begin with the commencement of drawdown of the Lower or Upper Ash Ponds, whichever occurs first and conclude with the completion of dewatering. Drawdown shall be defined as the intentional lowering of the pond elevation below 2 feet 2 inches from the top of the concrete outfall structure for Outfall 004 and 15 feet 6 inches from the top of the concrete outfall structure for Outfall 005."

Part I.C.25 – Notification of Commencement of Discharge

The words "the LVWWTS" have been replaced with "Outfall 301" to clarify that the written notification requirements are required 10 days prior to the commencement of the discharge from Outfall 301.

Part I.C.29 – §316(a) Alternate Effluent Limitations

This special condition has been added requiring Dominion to submit to DEQ for approval a detailed plan to update the studies to support renewal of its §316(a) demonstration.

Attachment A for Outfall 301

The EPA Analysis Number listed for Beta-Endosulfan was edited to correct a clerical error and now specifies 608/625.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0004146

Effective Date: September XX, 2016
Expiration Date: August XX, 2021

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTION DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

OWNER:	Virginia Electric and Power Company
FACILITY NAME:	Dominion Chesterfield Power Station
COUNTY:	Chesterfield
FACILITY LOCATION:	500 Coxendale Road

The owner is authorized to discharge to the following receiving stream:

STREAM:	James River
RIVER BASIN:	James River
RIVER SUBBASIN:	James River (Lower)
SECTION:	1
CLASS:	II
SPECIAL STANDARDS:	bb

_____

Deputy Regional Director, Piedmont Regional Office

_____

Date

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date the permittee is authorized to discharge from outfall serial number 001 – Condenser Cooling Water from Units 7 and 8.

a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	Continuous	Calculated
(005) Total Residual Chlorine (µg/L) (2)	22	NA	NA	32	1 per Week	Grab(3)
(078) Temperature (ºF) (4)	NA	NA	NA	NL	Continuous	Measured
(082) Heat Rejected (BTU/Hour)	Heat rejected shall not exceed a maximum of $11.3 * 10^8$				Continuous(1)	Recorded(1)

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) The heat rejected calculation requires the following information: The gross turbine-generator loading and the condenser backpressure. These values are continually measured and recorded.

(2) Also see Part I.C.4.

(3) While chlorinating.

(4) The maximum unit discharge temperature from any of the contributing units shall be reported. The unit discharge temperatures from all units shall be continuously recorded utilizing an existing electronic data storage system (which cannot be calibrated to a NIST reference thermometer).

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. Effluent samples shall be collected downstream from the point of dechlorination.

d. When Part I.A.2 is effective, process wastewater from internal Outfall 101 may be discharged through Outfall 001.

e. Sampling for the parameters listed above may take place prior to commingling with treated process wastewater from internal Outfall 101.

2. During the period beginning with the commencement of drawdown at the Upper Ash Pond (UAP) or Lower Ash Pond (LAP), whichever occurs first, and lasting until completion of dewatering activities, or the permit's expiration date, whichever occurs sooner, the permittee is authorized to discharge from outfall serial number 101 – UAP and LAP Effluent – Closure (see Part I.C.24 for the definition of Closure).

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY[3]	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	5.0	Continuous	Measured
(002) pH (SU)	NA	NA	6.0	9.0	3 per Week	Grab
(004) Total Suspended Solids ~~(mg/L)~~	30 mg/l[1] / 560 Kg/d[1]	NA	NA	88~~100~~ mg/l[6] / 1670 Kg/d[6]	3 per Week	Grab
(005) Total Residual Chlorine (µg/L)	18	NA	NA	32	3 per Week	Grab
(007) Dissolved Oxygen (mg/L)	NA	NA	NL	NA	3 per Week	Grab
(019) Total Recoverable Copper (µg/L)	11	NA	NA	20[1]	3 per Week	4-HC
(023) Dissolved Chromium VI (µg/L)[7]	17	NA	NA	32	3 per Week	4-HC
(059) Total Organic Carbon (mg/L)	NA	NA	NA	110[1]	1 per Month	Grab
(090) Total Recoverable Molybdenum (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(137) Total Hardness (as $CaCO_3$) (mg/L)	NL	NA	NA	NL	3 per Week	4-HC
(145) Chloride (mg/L)	360[1]	NA	NA	660[1]	3 per Week	4-HC
(151) Total Recoverable Barium (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(185) Total Recoverable Nickel (µg/L)	26	NA	NA	48	3 per Week	4-HC

(186) Total Recoverable Silver (µg/L)	2.7	NA	NA	5.0	3 per Week	4-HC
(193) Total Recoverable Thallium (µg/L)	0.90	NA	NA	0.90	3 per Week	4-HC
(196) Total Recoverable Zinc (µg/L)	100[(1)]	NA	NA	190[(1)]	3 per Week	4-HC
(202) Total Recoverable Cadmium (µg/L)	1.4	NA	NA	2.6	3 per Week	4-HC
(212) Total Recoverable Arsenic (µg/L)	240[(1)]	NA	NA	440[(1)]	3 per Week	4-HC
(232) Total Recoverable Chromium III (µg/L)[(7)]	100[(1)]	NA	NA	190[(1)]	3 per Week	4-HC
(233) Total Recoverable Lead (µg/L)	17	NA	NA	31	3 per Week	4-HC
(235) Total Recoverable Mercury (µg/L)	1.2	NA	NA	2.2	3 per Week	Grab
(237) Total Recoverable Cobalt (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(257) Total Petroleum Hydrocarbons (TPH) (mg/L)[(4) (5)]	NA	NA	NA	NL	1 per Year	Grab
(361) Total Recoverable Iron (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(372) Total Recoverable Boron (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(408) Total Recoverable Selenium (µg/L)	7.7	NA	NA	14	3 per Week	4-HC
(409) Total Recoverable Vanadium (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(410) Total Recoverable Aluminum (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(500) Oil and Grease (mg/L)	15	NA	NA	20[(1)]	3 per Week	Grab
(704) WET Limitation, *Ceriodaphnia dubia* (NOAEC) [(2)]	NA	NA	100%	NA	1 per Month	24-HC
(705) WET Limitation, *Pimephales promelas* (NOAEC) [(2)]	NA	NA	100%	NA	1 per Month	24-HC
(720) WET Limitation, *Ceriodaphnia dubia* (TU_c) [(2)]	NA	NA	NA	2.85	1 per Month	24-HC

(721) WET Limitation, *Pimephales promelas* (TU_c) [2]	NA	NA	NA	2.85	1 per Month	24-HC
(796) Total Recoverable Beryllium (µg/L)	NL	NA	NA	NL	1 per Month	24-HC
(797) Total Recoverable Antimony (µg/L)	1,300[1]	NA	NA	1,300[1]	3 per Week	4-HC

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable
"3 per Week" shall occur at least three (3) days per week with a minimum of 48 hours between sampling events. A sampling week extends Sunday through Saturday. The permittee shall receive results for parameters identified with a monitoring frequency of "3 per Week" within four business days of taking the sample. Results of the weekly sampling shall be reported to DEQ no later than the close of business Friday of the week following sample collection. This reporting requirement does not substitute for, or alter, Part II.C concerning the monthly reporting of monitoring results with the Discharge Monitoring Report.
"1 per Month" monitoring means the composite period for parameters identified with a frequency of 1 per Month for Outfall 101 shall occur within the composite period for the WET monitoring.

(1) Limitation expressed in two significant figures.

(2) See Part I.C.17.b.

(3) See Part I.C.27 for drawdown requirements.

(4) TPH is the sum of individual gasoline range organics and diesel range organics (or TPH-GRO and TPH-DRO) to be measured by EPA SW846 Method 8015 for gasoline and diesel range organics, or by EPA SW846 Methods 8260 Extended and 8270 Extended.

(5) At least one sample shall be taken during closure activities.

(6) Limitation expressed in three significant figures.

(7) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed in Part I.C.14.a.

If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

If the result of the total chromium analysis is detectable, both Chromium III and Chromium VI shall be reported as the number measured.

If the result of the total chromium analysis exceeds effluent limitations for Chromium III, Chromium VI, or both, the result shall be considered a violation of the respective limitations.

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN040086, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.

d. See Part I.C.24 for details on when closure monitoring and limits become effective.

e. The discharge from internal Outfall 101 is authorized to discharge through Outfall 001 or 002.

f. There shall be no discharge of bottom ash or fly ash transport wastewaters generated at this facility on or after November 1, 2018. On or after November 1, 2018, any bottom ash or fly ash transport wastewaters generated at this facility prior to that date shall be regarded as legacy wastewaters, which may be discharged in accordance with the above respective Part I.A. subpart requirements for this outfall.

3. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 002 – Condenser Cooling Water from Unit 3.

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	Continuous	Calculated
(005) Total Residual Chlorine (µg/L) (2)	22	NA	NA	32	1 per Week	Grab(3)
(019) Dissolved Copper (µg/L)	NL	NA	NA	NL	1 per Quarter	Grab
(078) Temperature (ºF) (4)	NA	NA	NA	NL	Continuous	Measured
(082) Heat Rejected (BTU/Hour)	Heat rejected shall not exceed a maximum of 6.52 *10^8				Continuous (1)	Recorded(1)

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable
"1 per Quarter" means one sample taken every calendar quarter, in accordance with the following schedule: 1st Quarter (January 1 – March 31, to be reported on the Discharge Monitoring Report (DMR) due no later than April 10th); 2nd Quarter (April 1 – June 30, to be reported on the DMR due no later than July 10th); 3rd Quarter (July 1 – September 30, to be reported on the DMR due no later than October 10th); 4th Quarter (October 1 – December 31, to be reported on the DMR due no later than January 10th).

(1) The heat rejected calculation requires the following information: The gross turbine-generator loading and the condenser backpressure. These values are continually measured and recorded.

(2) Also see Part I.C.4.

(3) While chlorinating.

(4) The maximum unit discharge temperature shall be reported. The unit discharge temperature shall be continuously recorded utilizing an existing electronic data storage system (which cannot be calibrated to a NIST reference thermometer).

   b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

   c. Effluent samples shall be collected downstream from the point of dechlorination.

   d. When Part I.A.2 is effective, process wastewater from internal Outfall 101 may be discharged through Outfall ~~001~~002.

   e. Sampling for the parameters listed above may take place prior to commingling with treated process wastewater from internal Outfall 101.

4. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 003 – Condenser Cooling Water from Units 4, 5, and 6.

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NL	NL	Continuous	Calculated
(005) Total Residual Chlorine (µg/L) (2)	11	NA	NA	16	1 per Week	Grab(3)
(078) Temperature (ºF) (4)	NA	NA	NA	NL	Continuous	Measured
(083) Heat Rejected (BTU/Hour)	Heat rejected shall not exceed a maximum of 5.55 *10^9				Continuous (1)	Recorded(1)

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) The heat rejected calculation requires the following information: The gross turbine-generator loading and the condenser backpressure. These values are continually measured and recorded.

(2) Also see Part I.C.4.

(3) While chlorinating.

(4) The maximum unit discharge temperature from any of the contributing units shall be reported. The unit discharge temperatures from all units shall be continuously recorded utilizing an existing electronic data storage system (which cannot be calibrated to a NIST reference thermometer).

   b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

   c. Effluent samples shall be collected downstream from the point of dechlorination.

5. During the period beginning with the commencement of discharge from the Low Volume Wastewater Treatment System (LVWWTS) and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 301 – Effluent from LVWWTS.

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	6.0	Continuous	Calculated
(002) pH (SU)	NA	NA	6.0	9.0	1 per Day	Grab
(004) Total Suspended Solids (TSS) (mg/L)	30(1)	NA	NA	50(1)	1 per Month	Grab
(005) Total Residual Chlorine (µg/L)	180(1)	NA	NA	180(1)	1 per Month	Grab
(019) Interim – Total Recoverable Copper (µg/L)(2)	NL	NA	NA	NL	1 per Month	24-HC
(019) Final – Total Recoverable Copper (µg/L)(2)	72	NA	NA	72	1 per Month	24-HC
(039) Ammonia as N (kg/d)	NA	NA	NA	235 kg/d	1 per Week	Grab
(145) Interim – Chloride (mg/L)(2)	NL	NA	NA	NL	1 per Month	24-HC
(145) Final – Chloride (mg/L)(2)	3100(1)	NA	NA	3100(1)	1 per Month	24-HC
(185) Interim – Total Recoverable Nickel (µg/L)(2)	NL	NA	NA	NL	1 per Month	24-HC
(185) Final – Total Recoverable Nickel (µg/L)(2)	230(1)	NA	NA	230(1)	1 per Month	24-HC
(196) Interim – Total Recoverable Zinc (µg/L)(2)	NL	NA	NA	NL	1 per Month	24-HC
(196) Final – Total Recoverable Zinc (µg/L)(2)	900(1)	NA	NA	900(1)	1 per Month	24-HC
(349) Heptachlor (µg/L)	NL	NA	NA	NL	1 per 6 Months	24-HC
(500) Oil and Grease (mg/L)	15	NA	NA	20(1)	1 per Month	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable
"24-HC" means 24 hour composite sample.
"1 per 6 Months" means one sample collected every calendar semiannual period in accordance with the following schedule: January 1 through June 30 to be reported on the DMR due July 10th and July 1 through December 31 to be reported on the DMR due January 10th.

(1) Limitation expressed in two significant figures.

(2) See Part I.B.1 for details regarding the compliance schedule.

b. No discharge of fly ash transport water or bottom ash transport water is permitted from this outfall. Transport water does not include low volume, short duration discharges of wastewater from minor leaks (e.g., leaks from valve packing, pipe flanges, or piping) or minor maintenance events (e.g., replacement of valves or pipe sections).

c. See Part I.C.25 regarding commencement of discharge.

d. Discharge from this outfall is prohibited when the daily flow of Outfall 003 is less than 57.28 MGD.

e. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with wastestreams that will be relocated to this outfall and are included in the current Registration List under Registration Number VAN040086, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.

6. During the period beginning with the commencement of discharge from ~~the LVWWTS~~ Outfall 301 and lasting until the permit's expiration, the permittee is authorized to discharge from outfall serial number 302 – Effluent from the flue gas desulfurization wastewater treatment plant (FGD WWTP).

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Day	Calculated
(002) pH (SU)	NA	NA	NL	NL	1 per Month	Grab
(004) Total Suspended Solids	30 mg/l(2) 22 Kg/d(3) 34 Kg/d(4)	NA	NA	100 mg/l(3) 72 Kg/d(3) 114 Kg/d(4)	1 per Week	Grab
(212) Interim - Total Recoverable Arsenic (µg/L)	NL	NA	NA	NL	1 per Month	2G/24–HC
(212) Final - Total Recoverable Arsenic (µg/L)(1)	8	NA	NA	11	1 per Week	24–HC
(235) Interim - Total Recoverable Mercury (ng/L)	NL	NA	NA	NL	1 per Month	Grab
(235) Final - Total Recoverable Mercury (ng/L)(1)	356	NA	NA	788	1 per Week	Grab
(389) Interim - Nitrate/Nitrite as N (mg/L)	NL	NA	NA	NL	1 per Month	2G/24–HC
(389) Final - Nitrate/Nitrite as N (mg/L)(1)	4.4	NA	NA	17	1 per Week	24-HC
(408) Interim - Total Recoverable Selenium (µg/L)	NL	NA	NA	NL	1 per Month	2G/24–HC
(408) Final - Total Recoverable Selenium (µg/L)(1)	12	NA	NA	23	1 per Week	24–HC
(500) Oil and Grease (mg/L)	15	NA	NA	20(2)	1 per Week	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.

"NA" means not applicable
"24-HC" means 24 hour composite sample.
"2G/24-HC" means two flow proportioned grab samples collected with a minimum of 8 hours between the two samples within a 24 hour period.

(1) See Part I.B.2 for details regarding the compliance schedule.

(2) Limitation expressed in two significant figures.

(3) Limitation expressed in three significant figures and is applicable if combustion residual leachate is separately treated and discharged to Outfall 301.~~.~~

(4) Limitation expressed in three significant figures and is applicable if combustion residual leachate from the Fossil Fuel Combustion Product (FFCP) Management Facility is directed to the FGD WWTP for treatment and discharge through Outfall 302.

~~b. Combustion residual leachate from the Fossil Fuel Combustion Product (FFCP) Management Facility may be directed to the FGD WWTP for treatment and discharge through Outfall 302.~~

7. During the period beginning with the commencement of discharge from ~~the LVWWTS~~Outfall 301 and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 303 – Effluent from Metal Cleaning Waste Treatment Basin.

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Day	Calculated
(002) pH (SU)	NA	NA	NL	NL	1 per Week	Grab
(004) Total Suspended Solids (mg/L)	30[(1)]	NA	NA	100[(2)]	1 per Week	Grab
(019) Total Recoverable Copper (mg/L)	1.0	NA	NA	1.0	1 per Week	Grab
(031) Total Recoverable Iron (mg/L)	1.0	NA	NA	1.0	1 per Week	Grab
(500) Oil and Grease (mg/L)	15	NA	NA	20[(1)]	1 per Week	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) Limitation expressed in two significant figures.

(2) Limitation expressed in three significant figures.

8. During the period beginning with the commencement of discharge from ~~the LVWWTS~~Outfall 301 and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 304 – Combustion residual leachate from the Fossil Fuel Combustion Product (FFCP) Management Facility.

   a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Day	Calculated
(002) pH (SU)	NA	NA	NL	NL	1 per Week	Grab
(004) Interim – Total Suspended Solids (mg/L)[(2)]	NL	NA	NA	NL	1 per Month	Grab
(004) Final – Total Suspended Solids (mg/L)[(2)]	30 [(1)]	NA	NA	100[(3)]	1 per Week	Grab
(212) Interim – Total Recoverable Arsenic (µg/L)[(2)]	NL	NA	NA	NL	1 per Month	Grab
(212) Final – Total Recoverable Arsenic (µg/L)[(2)]	8	NA	NA	11	1 per Week	Grab
(235) Interim – Total Recoverable Mercury (ng/L)[(2)]	NL	NA	NA	NL	1 per Month	Grab
(235) Final – Total Recoverable Mercury (ng/L)[(2)]	356	NA	NA	788	1 per Week	Grab
(500) Interim – Oil and Grease (mg/L)[(2)]	NL	NA	NA	NL	1 per Month	Grab
(500) Final – Oil and Grease (mg/L)[(2)]	15	NA	NA	20[(1)]	1 per Week	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) Limitation expressed in two significant figures.

(2) See Part I.B.3 for details regarding the compliance schedule.

(3) Limitation expressed in three significant figures.

9. During the period beginning with the commencement of discharge from the Coal Pile Runoff Metals Treatment System and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 305 – Coal Pile Runoff Metals Treatment System.

a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Day	Calculated
(004) Total Suspended Solids (mg/L)	50(1)	NA	NA	50(1)	1 per Week	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) Limitation expressed in two significant figures

~~(1)~~(2) Commencement of discharge does not include testing and commissioning of the Coal Pile Runoff Metals Treatment System. The permittee shall notify DEQ within 72 hours of the commencement of discharge of the Coal Pile Runoff Metals Treatment System.

10. During the period beginning with the permit's effective date and lasting until drawdown begins or the permit's expiration date, whichever occurs sooner, the permittee is authorized to discharge from outfall serial number 004 – LAP Effluent – Pre-Drawdown.

a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	2 per Month	Calculated
(002) pH (SU)	NA	NA	6.0	9.0	2 per Month	Grab
(004) Total Suspended Solids (mg/L)	30[1] / 1200 Kg/d[1,5]	NA	NA	88 / 3400 Kg/d[1,5]	2 per Month	Grab
(007) Dissolved Oxygen (mg/L)	NA	NA	NL	NA	1 per Month	Grab
(039) Ammonia as N (kg/d)	NA	NA	NA	235	1 per Week	Grab
(039) Interim - Ammonia as N (mg/L) [4]	13	NA	NA	19	1 per Week	Grab
(039) Final - Ammonia as N (mg/L) [4]	0.61	NA	NA	0.80	2 per Month	24-HC
(059) Total Organic Carbon (mg/L)	NA	NA	NA	110[1]	1 per Month	Grab
(193) Interim - Total Recoverable Thallium (µg/L) [4]	NL	NA	NA	NL	2 per Month	Grab
(193) Final - Total Recoverable Thallium (µg/L) [4]	0.47	NA	NA	0.47	2 per Month	Grab
(257) Total Petroleum Hydrocarbons (TPH)[3]	NA	NA	NA	NL	1 per Year	Grab
(408) Interim - Total Recoverable Selenium (µg/L) [4]	NL	NA	NA	NL	2 per Month	Grab
(408) Final - Total Recoverable Selenium (µg/L) [4]	5.9	NA	NA	7.3	2 per Month	Grab

(500) Oil and Grease (mg/L)	15	NA	NA	20(1)	2 per Month	Grab
(720) Interim – Chronic WET Limitation, *Ceriodaphnia dubia* (TU_c) (2)(4)	NA	NA	NA	50	1 per Quarter	24-HC
(720) Final - Chronic WET Limitation, *Ceriodaphnia dubia* (TU_c) (2)(4)	NA	NA	NA	1.36	1 per Quarter	24-HC

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable
"24-HC" means 24 hour composite sample.
"1 per Quarter" means one sample taken every calendar quarter, in accordance with the following schedule: 1st Quarter (January 1 – March 31, to be reported on the Discharge Monitoring Report (DMR) due no later than April 10th); 2nd Quarter (April 1 – June 30, to be reported on the DMR due no later than July 10th); 3rd Quarter (July 1 – September 30, to be reported on the DMR due no later than October 10th); 4th Quarter (October 1 – December 31, to be reported on the DMR due no later than January 10th).
"1 per Year" means one sample taken every complete calendar year and reported as part of the DMR due no later than January 10th of the subsequent year.

(1) Limitation expressed in two significant figures.

(2) See Special Condition I.C.17.e.

(3) TPH is the sum of individual gasoline range organics and diesel range organics (or TPH-GRO and TPH-DRO) to be measured by EPA SW846 Method 8015 for gasoline and diesel range organics, or by EPA SW846 Methods 8260 Extended and 8270 Extended.

(4) See Part I.B.4 for details regarding the compliance schedule.

(5) Effective date for loading limits is November 1, 2018.

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN040086, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.

d. See Part I.C.24 for discharge notification requirements and a definition of drawdown.~~details on when closure monitoring and limits become effective~~.

e. There shall be no discharge of bottom ash or fly ash transport wastewaters generated at this facility on or after November 1, 2018. On or after November 1, 2018, any bottom ash or fly ash transport wastewaters generated at this facility prior to that date shall be regarded as legacy wastewaters, which may be discharged in accordance with the above respective Part I.A. subpart requirements for this outfall.

11. During the period beginning with the permit's effective date and lasting until the commencement of discharge from ~~the LVWWTS~~Outfall 301 or the permit's expiration date, whichever occurs sooner, the permittee is authorized to discharge from outfall serial number 401 – Effluent from Metal Cleaning Waste Treatment Basin.

    a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Day	Calculated
(002) pH (SU)	NA	NA	NL	NL	1 per Week	Grab
(004) Total Suspended Solids (mg/L)	30(1)	NA	NA	100(2)	1 per Week	Grab
(019) Total Recoverable Copper (mg/L)	1.0	NA	NA	1.0	1 per Week	Grab
(031) Total Recoverable Iron (mg/L)	1.0	NA	NA	1.0	1 per Week	Grab
(500) Oil and Grease (mg/L)	15	NA	NA	20(1)	1 per Week	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) Limitation expressed in two significant figures.

(2) Limitation expressed in three significant figures.

b. Upon commencement of discharge from ~~the LVWWTS~~Outfall 301, discharge from internal Outfall 401 will convert to internal Outfall 303.

12. During the period beginning with the permit's effective date and lasting until completion of the Compliance Schedule detailed in Part I.B or commencement of discharge from ~~the LVWWTS~~Outfall 301, whichever occurs sooner, the permittee is authorized to discharge from outfall serial number 402 – Effluent from the FGD WWTP.

a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Day	Calculated
(002) pH (SU)	NA	NA	NL	NL	1 per Week	Grab
(004) Total Suspended Solids	30 mg/l(2) | 22 Kg/d(2)	NA	NA	100 mg/l(3) | 72 Kg/d(3)	1 per Week	Grab
(212) Interim - Total Recoverable Arsenic (µg/L) (1)	NL	NA	NA	NL	1 per Month	2G/24-HC
(212) Final - Total Recoverable Arsenic (µg/L)(1)	8	NA	NA	11	1 per Week	24-HC
(235) Interim - Total Recoverable Mercury (ng/L) (1)	NL	NA	NA	NL	1 per Month	Grab
(235) Final - Total Recoverable Mercury (ng/L) (1)	356	NA	NA	788	1 per Week	Grab
(389) Interim - Nitrate/Nitrite as N (mg/L) (1)	NL	NA	NA	NL	1 per Month	2G/24-HC
(389) Final - Nitrate/Nitrite as N (mg/L)(1)	4.4	NA	NA	17	1 per Week	24-HC
(408) Interim - Total Recoverable Selenium (µg/L) (1)	NL	NA	NA	NL	1 per Month	2G/24-HC
(408) Final - Total Recoverable Selenium (µg/L) (1)	12	NA	NA	23	1 per Week	24-HC
(500) Oil and Grease (mg/L)	15	NA	NA	20(2)	1 per Week	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable
"24-HC" means 24 hour composite sample.
"2G/24-HC" means two flow proportioned grab samples collected with a minimum of 8 hours between the two samples within a 24 hour period.

(1) See Part I.B.2 for details regarding the compliance schedule.

(2) Limitation expressed in two significant figures.

(3) Limitation expressed in three significant figures.

b. Upon commencement of discharge from ~~the LVWWTS~~Outfall 301, discharge from internal Outfall 402 will convert to internal Outfall 302.

13. During the period beginning with the permit's effective date and lasting until drawdown begins or the permit's expiration date, whichever occurs sooner, the permittee is authorized to discharge from outfall serial number 005 – UAP Effluent – Pre-Drawdown.

a. Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
(001) Flow (MGD)	NL	NA	NA	NL	1 per Month	Calculated
(002) pH (SU)	NA	NA	6.0	9.0	1 per Month	Grab
(004) Total Suspended Solids ~~(mg/L)~~	30 mg/l[1] / 460 Kg/d[1]	NA	NA	100 mg/l[2] / 1530 Kg/d[2]	1 per Month	Grab
(007) Dissolved Oxygen (mg/L)	NA	NA	NL	NA	1 per Month	Grab
(500) Oil and Grease (mg/L)	15	NA	NA	20 [1]	1 per Month	Grab

"NL" means no limitation is established. Monitoring and reporting, however, are required.
"NA" means not applicable

(1) Limitation expressed in two significant figures.

(2) Limitation expressed in three significant figures.

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN040086, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.

B. COMPLIANCE SCHEDULE

1. Outfall 301 – LVWWTS - The permittee shall achieve compliance with the final limits and monitoring requirements for Total Recoverable Copper, Chloride, Total Recoverable Nickel, and Total Recoverable Zinc at Outfall 301 as specified in Part I.A.5 in this permit, in accordance with the following schedule:

a. Submit progress reports to DEQ	**Annually, after the effective date of permit reissuance.**
b. Achieve compliance with effluent limitations	**Within 4 years of the effective date of the permit reissuance**.

In accordance with the dates identified in the above schedule of compliance, the permittee shall submit to the Piedmont Regional Office either a report of progress, or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. Monitoring for Total Recoverable Copper, Chloride, Total Recoverable Nickel, and Total Recoverable Zinc shall commence in accordance with Part 1.A.5. Final limitations and monitoring requirements shall substitute and supersede all interim limitations and monitoring requirements delineated in Parts I.A.5.a, upon completion of the Part I.B.1.b schedule of compliance period.

2. Outfalls 302 and 402 – FGD WWTP - The permittee shall achieve compliance with the final limits and monitoring requirements for Total Recoverable Arsenic, Total Recoverable Mercury, Nitrate/Nitrite as N, and Total Recoverable Selenium at Outfalls 302 and 402 as specified in Parts I.A.6 and I.A.12 in this permit, in accordance with the following schedule:

a. Submit progress reports to DEQ	**Annually, after the effective date of permit reissuance.**
b. Achieve compliance with effluent limitations	**By March 29, 2022**.

In accordance with the dates identified in the above schedule of compliance, the permittee shall submit to the Piedmont Regional Office either a report of progress, or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. Monitoring for Total Recoverable Arsenic, Total Recoverable Mercury, Nitrate/Nitrite as N, and Total Recoverable Selenium shall commence in accordance with Parts I.A.6 and I.A.12. Final limitations and monitoring requirements shall substitute and supersede all interim limitations and monitoring requirements delineated in Parts I.A.6.a, and I.A.12.a of this permit upon completion of the Part I.B.2.b schedule of compliance period.

3. Outfall 304 – Combustion residual leachate from FFCP Management Facility - The permittee shall achieve compliance with the final limits and monitoring requirements for Total Suspended Solids, Total Recoverable Arsenic, Total Recoverable Mercury, and Oil and Grease at Outfall 304 as specified in Part I.A.8 in this permit, in accordance with the following schedule:

a. Submit progress reports to DEQ	**Annually, after the effective date of permit reissuance.**
b. Achieve compliance with effluent limitations	**Within 4 years of the effective date of the permit reissuance**.

In accordance with the dates identified in the above schedule of compliance, the permittee shall submit to the Piedmont Regional Office either a report of progress, or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. Monitoring for Total Suspended Solids, Total Recoverable Arsenic, Total Recoverable Mercury, and Oil and Grease shall commence in accordance with Part 1.A.8. Final limitations and monitoring requirements shall substitute and supersede all interim limitations and monitoring requirements delineated in Parts I.A.8.a, upon completion of the Part I.B.3.b schedule of compliance period.

In the event the leachate is directed to the FGD WWTP for treatment and discharge through Outfall 302 as allowed in Part I.A.6.b, this compliance schedule does not apply and the discharge shall be subject to the compliance schedule in Part I.B.2.

4. Outfall 004 – LAP Effluent Pre-Drawdown - The permittee shall achieve compliance with the final limits and monitoring requirements for Ammonia as N, Total Recoverable Thallium, Total Recoverable Selenium, and Chronic WET at Outfall 004 as specified in Part I.A.10, in accordance with the following schedule:

a. Submit progress reports to DEQ	**Annually, after the effective date of permit reissuance.**
b. Achieve compliance with effluent limitations	**Within 4 years of the effective date of the permit reissuance**.

In accordance with the dates identified in the above schedule of compliance, the permittee shall submit to the Piedmont Regional Office either a report of progress, or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. Monitoring for Ammonia as N, Total Recoverable Thallium and Total Recoverable Selenium shall commence in accordance with Part I.A.10. Final limitations and monitoring requirements shall substitute and supersede all interim limitations and monitoring requirements delineated in Parts I.A.10.a, upon completion of the Part I.B.4.b schedule of compliance period.

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/L);

(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/L);

(2) One milligram per liter (1 mg/L) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Board.

2. Nutrient Reopener

The permit may be modified or, alternatively, revoked and reissued:

a. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade; or

b. To incorporate alternative nutrient limitations and/or monitoring requirements, should:

(1) the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or

(2) a future water quality regulation or statute require new or alternative nutrient control.

3. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

4. Discharge of Chlorine in Cooling Water

a. Total residual chlorine may only be discharged from any single generating unit for more than two hours per day when the permittee demonstrates to DEQ that discharge for more than two hours is required for macroinvertebrate control. If the permittee is dechlorinating, the two hour requirement is nullified.

b. Simultaneous multi-unit chlorination is permitted.

c. Monitoring for total residual chlorine shall only be required when the permittee is chlorinating.

5. Operation and Maintenance Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent samples taken for compliance with this permit;

b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;

c. Discussion of Best Management Practices, if applicable;

d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.C.3 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored in bulk at this facility;

e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;

f. Plan for the management and/or disposal of waste solids and residues;

g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance.

h. List of facility, local and state emergency contacts; and,

i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

6. Discharge of Tank Bottom Waters
There shall be no discharge of tank bottom waters from bulk fuel oil or waste oil storage facilities.

7. Groundwater Monitoring

a. Upper Ash Pond (UAP), Lower Ash Pond (LAP), and Metals Cleaning Pond:
The permittee shall continue sampling in accordance with the groundwater monitoring plan (GWMP) dated September 2001, approved by letter dated October 5, 2001, and modification approved by letter dated November 15, 2001. Any changes to the plan must be submitted for approval to the DEQ Piedmont Regional Office. The approved plan is an enforceable part of the permit. The UAP and LAP portions of the monitoring plan shall remain in effect until such time that they are superseded by a DEQ Solid Waste program-approved plan. In the event that the UAP and LAP portions of the plan are superseded by a Solid Waste program-approved plan, the Metals Pond portion of the plan, as detailed in Appendix B of the approved GWMP, shall remain in effect as an enforceable part of the VPDES permit.

b. Metals Cleaning Pond:
No later than one year following the effective date of this permit, the permittee shall submit for approval a separate GWMP and Groundwater Quality and Risk Assessment Report addressing chloride in the groundwater adjacent to the Metals Cleaning Pond. The report shall include the following:

(1) Assessment of the source of chloride.

(2) Assessment of the spatial extent and concentration of chloride in the groundwater.

(3) Identification of both human health and environmental receptors and an assessment of the risk to each receptor.

Following DEQ review and approval of the Groundwater Quality and Risk Assessment Report, a Corrective Action Plan may be required. The plan shall be due within 180 days of being notified in writing by the Department. The plan shall set forth the steps to be taken by the permittee to ensure that the contamination source is adequately addressed pursuant to the Groundwater Quality and Risk Assessment Report. Once approved, this plan shall be incorporated into the permit by reference and become an enforceable part of this permit.

8. Closure Plan for Upper Ash Pond
By letter dated April 1, 2015, the Department of Environmental Quality approved a revised closure plan for the Upper (East) Ash Pond (also known as the New Ash Pond). The approved plan consists of a Revised Phasing Plan dated April 2015, a Revised Closure Plan dated September 2003, a Revised Phasing Plan dated May 2003, and a Revised Construction Quality Assurance Plan, dated May 2003. This plan shall remain in effect and be an enforceable part of this permit until such time that it is superseded by a solid waste permit in accordance with the Commonwealth's Solid Waste program (9VAC20-81-10 et seq.). If necessary, prior to issuance of a solid waste permit, the closure plan shall be updated as needed to comply with EPA's Final Rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities.

9. Discharge of Polychlorinated Biphenyl Compounds
There shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid. Compliance with this requirement will be determined using EPA Method 608.

10. Low Level PCB Sampling for Internal Outfall 301
The permittee shall monitor the effluent at Internal Outfall 301 for Polychlorinated Biphenyls (PCBs). DEQ will use these data for development (*or implementation*) of a PCB TMDL for the Lower James River. The permittee shall conduct the sampling and analysis in accordance with the requirements specified below.

At a minimum:

a. Monitoring and analysis shall be conducted in accordance with EPA Method 1668 revisions A, B, C or other revisions issued by EPA prior to final promulgation, congener specific results as specified in the DEQ PCB Point Source Monitoring Guidance (GM09-2001). It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.

b. The permittee shall collect a minimum of 2 wet weather samples according to the PCB Point Source Guidance, Appendix C (Sample Collection Methods for Effluent and Storm Water). These samples shall be taken at Internal Outfall 301 during the term of the permit. Alternatively, samples previously collected and analyzed with Method 1668 may be used in satisfying the total number of samples required even if the collection occurred prior to the current permit term.

c. The sampling protocol shall be submitted to DEQ-Piedmont Regional Office for review and approval at least 30 days before the commencement of discharge from Outfall 301~~prior to the first sample collection but no later than 90 days from the effective date of the permit~~.

d. The data shall be submitted to the DEQ-Piedmont Regional Office no later than one (1) year from the commencement of discharge at Outfall 301 according to the DEQ PCB Point Source Guidance, Appendix E (Reporting Requirements for Analytical (PCB) Data Generated Using EPA Method 1668). The submittal shall include the unadjusted and appropriately quantified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results should be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.

e. If the results of this monitoring indicate actual or potential exceedance of the water quality criterion or the Waste Load Allocation specified in the approved TMDL, the permittee shall submit to the DEQ-Piedmont Regional Office within 180 days of notification by DEQ for review and approval a Pollutant Minimization Plan (PMP) designed to locate and reduce sources of PCBs in the collection system. A component of the plan may include an evaluation of the PCB congener distribution in the initial source intake water to determine the net contributions of PCBs introduced to the treatment works.

11. Discharge of Debris from Trash Racks
Debris collected on the intake trash racks shall not be returned to the waterway.

12. Discharges of Uncontaminated River Water
The following discharges shall not contain any process wastewater:

a. The occasional pumping of river water from the intake screen wells to permit access for maintenance.

b. Discharges associated with the routine testing of the fire fighting system involving withdrawal and direct return of water from the river.

c. The discharge of river water from one sump pump each in the condenser cooling water intake pump rooms for Units 7 and 8.

d. Intake screen backwash.

e. Raw water make-up to the clarifier discharged prior to use.

f. Service water (untreated river water) discharged prior to use in fly ash conditioning.

13. Licensed Operator Requirement

The permittee shall employ or contract at least one Class 2 licensed wastewater works operator for the facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations for the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

14. Compliance Reporting

a. The quantification levels (QL) shall be less than or equal to the following concentrations:

Effluent Characteristic*	Quantification Level
Ammonia as N	0.20 mg/L
Chloride	10 mg/L
Nitrate/Nitrite as N	0.5 mg/L
Oil & Grease	5.0 mg/L
Total Petroleum Hydrocarbons	0.5 mg/L
Total Recoverable Antimony	5.0 µg/L
Total Recoverable Arsenic	5.0 µg/L
Total Recoverable Cadmium	1.0 µg/L
Total Recoverable Chromium III	5.0 µg/L
Dissolved Chromium VI	5.0 µg/L
Total Recoverable Copper	5.0 µg/L
Total Recoverable Iron	250 µg/L
Total Recoverable Lead	5.0 µg/L
Total Recoverable Mercury	0.1 µg/L
Total Recoverable Nickel	5.0 µg/L
Total Recoverable Selenium	5.0 µg/L
Total Recoverable Silver	0.4 µg/L
Total Recoverable Thallium	0.47 µg/L
Total Recoverable Zinc	25 µg/L
Total Residual Chlorine	0.10 mg/L
TSS	1.0 mg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

b. **Monthly Average:** Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

Daily Maximum: Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows:

All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

c. **Significant Digits:** The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

15. TMDL Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

16. Treatment Works Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Piedmont Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

The LAP and UAP closures are excluded from the requirements of this special condition as they will be closed in accordance with solid waste regulations. The temporary dewatering treatment system (CSWTS) discussed in Part I.C.21 is also excluded from the requirements of this special condition.

17. Whole Effluent Toxicity (WET) Testing Program

a. Outfalls 001 and 002:

(1) In accordance with the schedule in I.C.17.g(1) below, the permittee shall perform acute and chronic annual toxicity testing on Outfalls 001 and 002 using 24 hour flow-proportioned composite samples for the duration of the permit.

The acute test to use is:

48 Hour Static Acute test using *Ceriodaphnia dubia*

These acute tests shall be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported. The LC_{50} should

also be determined and noted on the submitted report. Tests in which the control survival is less than 90% are not acceptable.

The chronic test to use is:

Chronic 3-Brood Survival and Reproduction Static Renewal Test using *Ceriodaphnia dubia*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction. Results which cannot be quantified (i.e., a “less than” NOEC value are not acceptable, and a retest will have to be performed. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. Express the test NOEC as TU_c (Chronic Toxicity Units), by dividing 100/NOEC. The LC_{50} at 48 hours and the IC_{25} shall also be reported.

The permittee may provide additional samples to address data variability; these data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

(2) The test dilutions shall be able to determine compliance with the following endpoints:

(a) Acute tests:

Outfall 001 NOAEC = 100% effluent
Outfall 002 NOAEC = 100% effluent

(b) Chronic tests:

Outfall 001 NOEC $\geq$ 35% effluent equivalent to a TU_c of $\leq$2.85
Outfall 002 NOEC $\geq$ 35% effluent equivalent to a TU_c of $\leq$2.85

(3) The test data for each outfall will be evaluated statistically by DEQ for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, the permit may be modified or, alternatively, revoked and reissued to include a WET limit and compliance schedule for that outfall. Following written notification from DEQ of the need for including a WET limitation, the toxicity tests of Part I.C.17.a(1) for that outfall may be discontinued.

(4) The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

b. Outfall 101 – UAP and LAP Effluent – Closure – Acute and Chronic WET Limit Testing:

(1) The Whole Effluent Toxicity limitations of Part I.A.2 become effective upon commencement of closure activities as defined in Part I.C.24. The permittee shall conduct monthly tests using a composite sample comprised of hourly grabs for the period of discharge, not to exceed 24 hours. WET testing of Outfall 101 shall begin during the first full month following the initiation of discharge.

(2) WET Limits

(a) Acute tests: NOAEC = 100%.

(b) Chronic tests: NOEC $\geq$ 35% effluent, equivalent to a TU_c of ≤2.85.

(3) The acute tests to use are:

48 Hour Static Acute test using *Ceriodaphnia dubia*

48-Hour Static Acute test using *Pimephales promelas*

These single dilution acute tests are to be conducted using a minimum of 4 replicates, with 5 organisms each, for the control and 100% effluent. The NOAEC (No Observed Adverse

Effect Concentration) shall be reported as either =100% or <100% (less than 100%). The effluent will be in compliance if the survival of the test organisms in both the control and 100% effluent exposures equals or exceeds 90%. If the survival in the effluent is less than 90% and this value is significantly different from the control survival, as determined by hypothesis testing, the NOAEC is less than 100% and the effluent is not in compliance. Tests in which control survival is less than 90% are not acceptable. A retest of a non-acceptable test must be performed during the same compliance period as the .test it is replacing. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40CFR 136.3.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*

Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. The test endpoint (limit) must be represented by a dilution, and should be bracketed by at least one dilution above and one dilution below it. Results which cannot be determined (i.e., a “less than” NOEC value) are not acceptable, and a retest will have to be performed. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for DMR reporting. The 48 hour LC_{50} and IC_{25} should be included on the submitted test reports.

(4) One copy of each toxicity test report shall be submitted to the Piedmont Regional Office in accordance with the reporting schedule in Part I.C.17.g(4) below. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

(5) The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

(6) Frequency of Testing

Monthly testing is required as indicated in Part I.A.2 of this permit, beginning upon commencement of closure activities as defined in Part I.C.24.

c. Outfall 003 – Pre-Outfall 301~~LVWWTS~~ Discharge:

(1) In accordance with the schedule in Part I.C.17.g(1) below, the permittee shall perform annual acute and chronic toxicity tests of final effluent at Outfall 003 – Pre-~~LVWWTS~~ Outfall 301 Discharge using 24 hour flow-proportioned composite samples for the duration of the permit.

The acute tests shall be:

48 Hour Static Acute test using *Ceriodaphnia dubia*

48 Hour Static Acute test using *Pimephales promelas*

These acute tests shall be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported. The LC_{50} should also be determined and noted on the submitted report. Tests in which the control survival is less than 90% are not acceptable.

The chronic tests shall be:

Chronic 3-Brood Survival and Reproduction Static Renewal Test using *Ceriodaphnia dubia*

Chronic 7-day Survival and Growth Static Renewal test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction. Results which cannot be quantified (i.e., a “less than” NOEC value) are not acceptable, and a retest will have to be performed. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. Express the test NOEC as TU_c (Chronic Toxicity Units), by dividing 100/NOEC. The LC_{50} at 48 hours and the IC_{25} shall also be reported.

(2) The test dilutions shall be able to determine compliance with the following endpoints:

(a) Acute tests: NOAEC = 100% effluent

(b) Chronic tests: NOEC $\geq$ 69% effluent equivalent to a TU_c of $\leq$1.44

(3) The permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40CFR 136.3.

(4) The test data for each outfall will be evaluated statistically by DEQ for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, the permit may be modified or, alternatively, revoked and reissued to include a WET limit and compliance schedule for that outfall. Following written notification from DEQ of the need for including a WET limitation, the toxicity tests of Part I.C.17.c(1) for that outfall may be discontinued.

(5) The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

If evaluation of the data indicates that a limitation is not needed, annual acute and chronic testing shall commence in accordance with the remaining schedule in I.C.17.g(1) below.

d. Outfall 003 – ~~LVWWTS~~ Outfall 301 Discharge:
Final WET testing requirements for Outfall 003 (~~LVWWTS Discharge~~Outfall 301 Discharge) shall become effective upon commencement of discharge from ~~the LVWWTS~~Outfall 301. The WET testing shall be conducted as described above in Part I.C.17.c except that the testing shall be conducted in accordance with the schedule in Part I.C.17.g(2) below.

e. Outfall 004 – Pre-Drawdown - Chronic WET Limit Testing:

(1) The quarterly chronic tests required in Part I.A.10 of this permit to meet the interim limit of a TU_c of $\leq$50 and final limit of an NOEC $\geq$ 73%, equivalent to TU_c of $\leq$1.36 shall be:

Chronic 3-Brood Static Renewal Survival and Reproduction Tests using *Ceriodaphnia dubia*

These tests shall be conducted, using 24 hour flow-proportioned composite samples, in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction. The test endpoint (limit) shall be represented by a dilution, and at least one dilution above and one dilution below it. Results which cannot be determined (i.e., a “less than” NOEC value) are not acceptable, and a retest shall be performed. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. For reporting on the DMR, the NOEC is to be expressed in Chronic Toxicity Units (TU_C), which is obtained by dividing 100 by the test NOEC. The LC_{50} at 48 hours and the IC_{25} shall also be reported.

(2) One copy of each toxicity test report shall be submitted to the Piedmont Regional Office in accordance with the reporting schedule in Part I.C.17.g(3) below. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

(3) The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

(4) Upon the commencement of discharge from the LAP to Outfall 101, WET testing at Outfall 004 may be discontinued.

f. Outfall 005 – Pre-Drawdown – Acute and Chronic WET Testing:

(1) In accordance with the schedule in Part I.C.17.g(1) below, the permittee shall perform annual acute and chronic toxicity tests of final effluent at Outfall 005 – Pre-Drawdown. Grab samples shall be taken for this discharge during Pre-Drawdown activities. Chronic tests are required only if discharge occurs over five consecutive days. The permittee shall maintain a record of the dates that a discharge occurs at Outfall 005 and provide it to the Department upon request.

The acute tests shall be:

48 Hour Static Acute test using *Ceriodaphnia dubia*

48 Hour Static Acute test using *Pimephales promelas*

These acute tests shall be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported. The LC_{50} should also be determined and noted on the submitted report. Tests in which the control survival is less than 90% are not acceptable.

The chronic tests shall be:

Chronic 3-Brood Survival and Reproduction Static Renewal Test using *Ceriodaphnia dubia*

Chronic 7-day Survival and Growth Static Renewal test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. The LC_{50} at 48 hours and the IC_{25} shall also be reported. Results which cannot be quantified (i.e., a “less than” NOEC value) are not acceptable, and a retest shall be performed. The retest of a nonacceptable test shall be performed during the same compliance period as the test it is replacing. Express the test LC_{50} as TU_a (Acute Toxicity Units), by dividing $100/LC_{50}$. Express the test NOEC as TU_c (Chronic Toxicity Units), by dividing 100/NOEC. The LC_{50} at 48 hours and the IC_{25} shall also be reported.

(2) The test dilutions shall be able to determine compliance with the following endpoints:

(a) Acute tests: NOAEC = 100%.

(b) Chronic tests: NOEC $\geq$ 35% effluent, equivalent to a TU_c of ≤2.85.

(3) The permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40CFR 136.3

(4) The test data will be evaluated statistically by DEQ for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, the permit may be modified or, alternatively, revoked and reissued to include a WET limit and compliance schedule. Following written notification from DEQ of the need for including a WET limitation, the toxicity tests of Part I.C.17.f(1) may be discontinued.

(5) The permit may be modified or revoked and reissued to include pollutant specific limits should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

If evaluation of the data indicates that a limitation is not needed, annual acute and chronic testing shall commence in accordance with the remaining schedule in Part I.C.17.g(1) below.

g. Reporting Schedule:

(1) The permittee shall report the results of the toxicity testing on Outfalls 001, 002, 003 - Pre-LVWWTS Discharge, and 005 – Pre-Drawdown as appropriate, and supply to the Piedmont Regional Office one copy of each of the toxicity test reports specified in this WET Monitoring Program. The compliance period in which each test shall be performed is established as annual (consecutive 12 months) periods based on the effective date of the permit. Reports shall be submitted no later than the 10th of the month following the end of each compliance period.

Compliance Period	Monitoring Period	Report Due
1st Annual	October 1, 2016 - September 30, 2017	October 10, 2017
2nd Annual	October 1, 2017- September 30, 2018	October 10, 2018
3rd Annual	October 1, 2018- September 30, 2019	October 10, 2019
4th Annual	October 1, 2019- September 30, 2020	October 10, 2020

(2) WET testing for Outfall 003 - LVWWTS Discharge shall begin upon the commencement of discharge from the LVWWTS in accordance with the schedule below. The permittee shall report the results of the toxicity testing on Outfalls 003 - LVWWTS Discharge, and supply to the Piedmont Regional Office one copy of each of the toxicity test reports specified in this WET Monitoring Program. The compliance period in which each test shall be performed is established as calendar quarters for the first 10 quarters. Reports shall be submitted no later than the 10th of the month following the end of each compliance period.

Compliance Period	Monitoring Period	Report Due
1st Quarterly	October 1 – December 31, 2016	January 10, 2017
2nd Quarterly	January 1 – March 31, 2017	April 10, 2017
3rd Quarterly	April 1 – June 30, 2017	July 10, 2017
4th Quarterly	July 1 – September 30, 2017	October 10, 2017
5th Quarterly	October 1 – December 31, 2017	January 10, 2018
6th Quarterly	January 1 – March 31, 2018	April 10, 2018
7th Quarterly	April 1 – June 30, 2018	July 10, 2018
8th Quarterly	July 1 – September 30, 2018	October 10, 2018
9th Quarterly	October 1 – December 31, 2018	January 10, 2019
10th Quarterly	January 1 – March 31, 2019	April 10, 2019
1st Annual	April 1, 2019 – March 31, 2020	April 10, 2020
2nd Annual	April 1, 2020 – March 31, 2021	April 10, 2021

(3) Reporting for the Outfall 004 – Pre-Drawdown WET limitations shall be conducted quarterly and reported on the DMR as required in Part I.A.10 of this permit. One copy of the toxicity test report associated with each test, shall be submitted in hard copy or by email concurrent with the DMR on which the test result is reported.

(4) Reporting for the Outfall 101 WET limitations shall be conducted monthly and reported on the DMR as required in Part I.A.2 of this permit. Monthly monitoring will continue until dewatering activities associated with closure activities are completed. One copy of the

toxicity test report associated with each test, shall be submitted in hard copy or by email concurrent with the DMR on which the test result is reported.

18. Oil Storage Groundwater Monitoring Reopener
As this facility currently manages ground water in the bulk fuel oil storage area in accordance with 9 VAC 25-91-10 et seq., Facility and Aboveground Storage Tank (AST) Regulation, this permit does not presently impose ground water monitoring requirements in that storage area. However, this permit may be modified, or alternatively, revoked and reissued to include ground water monitoring not required by the AST regulation.

19. Water Quality Criteria Reopener
Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations. In addition, this permit may be modified, or alternatively, revoked and reissued to incorporate appropriate temperature limitations if the Virginia Water Quality Standards are revised to include numeric standards addressing human health.

20. CER
Prior to constructing any wastewater treatment works, the permittee shall submit a Concept Engineering Report (CER) to the DEQ Piedmont Regional Office. DEQ written approval shall be secured prior to constructing any wastewater treatment works. The permittee shall construct the wastewater treatment works in accordance with the approved CER. No later than 14 days following completion of construction of any project for which a CER has been approved, written notification shall be submitted to the DEQ Piedmont Regional Office certifying that, based on an inspection of the project, construction was completed in accordance with the approved CER. The written notification shall be certified by a professional engineer licensed in the Commonwealth of Virginia or signed in accordance with Part II.K of this permit. The installed wastewater treatment works shall be operated to achieve design treatment and effluent concentrations. Approval by the Department of Environmental Quality does not relieve the owner of the responsibility for the correction of design and/or operational deficiencies. Noncompliance with the CER shall be deemed a violation of this permit.

Upon approval of a CER for the installation of nutrient removal technology, DEQ staff shall initiate modification, or alternatively, revocation and reissuance, of this permit to include annual concentration limits based on the technology proposed in the CER. Upon completion of construction in accordance with a CER that has been approved by the DEQ Piedmont Regional Office, any nutrient removal facilities installed shall be operated to achieve design effluent Total Nitrogen and Total Phosphorus concentrations.

21. Treatment Requirements for the Lower and Upper Ash Pond Closure Discharge
Commencing with the use of mechanical methods to drawdown surface water from the Lower Ash Pond and the Upper Ash Pond sediment basin for the purposes of closure, all water from the decanting/dewatering process shall be treated prior to discharge. Treated wastewater that exceeds one or more of the following trigger concentrations, as determined by inline process sampling, shall be routed through enhanced treatment prior to discharge:

Parameter:	Enhanced Treatment Trigger (ug/L):
Arsenic	100
Selenium	5.0
Lead	7.4
Copper	6.0
Antimony	640
Thallium	0.47

Enhanced treatment of the wastewater shall be maintained until inline process sampling indicates that all pollutant concentrations are below the enhanced treatment triggers.

Inline process sampling shall be collected at a minimum every 4 hours at an in-process point immediately prior to the enhanced treatment module(s), and analytical results shall be returned

within approximately one hour after collection. This sampling is in addition to the effluent compliance monitoring required by this permit. The permittee shall maintain a log with the inline process sampling results and the times that enhanced treatment begins and ends. The log shall be available to DEQ upon request.

In addition to the DMR, the permittee shall submit a monthly summary report of the treated decanting/dewatering discharge no later than the 10th day of the month after monitoring takes place. The summary report shall contain the dates and times that enhanced treatment was turned on and off.

22. Outfall 301 - Water Quality Criteria Monitoring
The permittee shall monitor the effluent at internal Outfall 301 for the substances noted in Attachment A, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. Using Attachment A as the reporting form, the data shall be submitted no later than 90 days following the commencement of discharge from Outfall 301. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

23. Ash Pond Closure Stormwater Management
Best management practices (BMPs), structural and/or non-structural, shall be utilized by the permittee to minimize the impact of ash pond closure activities on industrial stormwater quality. Ash pond closure activities may include, but are not limited to the process of ash movement for off-site disposal, ash loading and unloading areas, any area(s) associated with the storage of ash prior to transport off-site, and vehicle tracking associated with the movement of ash.

The facility shall maintain a Stormwater Pollution Prevention Plan (SWPPP), required as part of Industrial Stormwater Permit General Permit No. VAR051023, that includes a description of the BMPs being implemented and a regular schedule for preventive maintenance of all BMPs where appropriate. All structural BMPs identified in the SWPPP shall be maintained in effective operating condition and shall be inspected for structural integrity and operational efficiency once per week during ash pond closure activities. Results of the weekly inspections and actions needed and performed in response to the weekly inspections shall be maintained with the SWPPP.

Nothing in this condition shall relieve the permittee from the responsibility for obtaining applicable permits for land disturbing activities, or permit coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.

24. Ash Pond Closure Discharge
The permittee shall notify the DEQ Piedmont Regional Office at least 72 hours prior to the planned commencement of the discharge ~~to~~ of draw~~-~~down ~~the~~ water ~~elevation~~ in the Upper or~~and~~ Lower Ash Ponds in preparation for pond closure. A second notification to the DEQ Piedmont Regional Office shall be provided within 24 hours after initiating the discharge ~~to~~ of draw~~-~~down ~~the~~ water ~~elevation in~~ from ~~-~~the Upper ~~and~~ or Lower Ash Ponds. Closure activities as addressed in this permit shall begin with the commencement of drawdown of the Lower or Upper Ash Ponds, whichever occurs first and conclude with the completion of dewatering. Drawdown shall be defined as the intentional lowering of the pond elevation below 2 feet 2 inches from the top of the concrete outfall structure for Outfall 004 and 15 feet 6 inches from the top of the concrete outfall structure for Outfall 005.

25. Notification of Commencement of Discharge
No later than 10 days prior to the commencement of discharge from ~~the LVWWTS~~Outfall 301, the permittee shall submit written notification to DEQ which provides the first day of discharge. This first day of discharge will be used as the trigger date for all other permit conditions which drive off the commencement of discharge.

26. Cease Discharge Requirements for Outfall 101 – UAP and LAP Effluent - Closure
The permittee shall maintain agreement(s) with its contracted lab(s) requiring that results be reported no later than 48 hours following the result determination and/or 48 hours following a Whole Effluent Toxicity test termination. The permittee shall immediately cease the discharge of the outfall upon receipt of results in exceedance of permit limitations and shall promptly notify DEQ, in no case later than 24 hours, after being informed of the exceedance. The DEQ notification shall include the laboratory notification to the permittee indicating the parameter exceedance, and date and time of notification to the permittee. Should an exceedance occur, the permittee shall initiate a review of the treatment operations and data to identify the cause(s) of the exceedance and initiate appropriate corrective action(s). Resumption of the discharge shall not occur until such time as an evaluation report is provided to DEQ and written authorization to resume the discharge is granted by DEQ.

27. Pond Closure Drawdown Rate
The drawdown rate of any pond or basin shall not exceed 2 foot per day to maintain the integrity of the dams, unless approved by the Department of Conservation and Recreation Dam Safety Program.

28. Process Wastewater Conveyance Investigation
No later than 180 days following the effective date of this permit, the permittee shall submit to the DEQ Piedmont Regional Office an approvable plan for a comprehensive facility-wide process wastewater conveyance investigation. The investigation shall address all process wastewater conveyances to identify potential and actual cross connections, unknown infrastructure, bypasses, and inflow or exfiltration that could result in an illicit or unauthorized discharge. Such investigation requirements may be satisfied by video camera, visual inspection, dye testing or other methods as reasonable and appropriate. The plan shall prioritize the projects according to risk potential and present a schedule, not to exceed 2 years from DEQ written approval of the plan, to complete the investigation and submit a final report summarizing the findings. The permittee shall notify the DEQ no later than 24 hours following discovery of any potential or actual illicit or unauthorized discharge and submit a written plan and schedule to the DEQ Piedmont Regional Office for necessary repair, replacement or corrective action activities no later than 30 days following discovery.

29. §316(a) Alternate Effluent Limitations
The permittee shall, by no later than 180 days following this permit reissuance, submit for approval to DEQ a detailed plan for the permittee to update the studies to support renewal of its §316(a) demonstration.

The detailed plan shall specify the nature and extent of the following information to be updated: biological, hydrographical and meteorological data; physical monitoring data; engineering or diffusion models; laboratory studies; representative important species; and other relevant information. In selecting representative important species, special consideration shall be given to state- and federally-listed threatened or endangered species found in the immediate vicinity of the discharge outfalls.

Alternatively, the permittee may base renewal of their demonstration upon the absence of prior appreciable harm in lieu of predictive studies. Any such demonstrations shall show:

a. That no appreciable harm has resulted from the normal component of the discharge (taking into accouint the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge has been made, or
b. That despite the occurrence of such previous harm, the alternative effluent limitations will nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made.

In determining whether or not prior appreciable harm has occurred, the Director shall consider the length of time in which the applicant has been discharging and the nature of the discharge.

The permittee may provide any additional information or studies which the permittee feels are appropriate to support renewal of their demonstration. Once approved by the DEQ, the plan shall become an enforceable provision of this permit. Results of the updated studies or demonstration shall be submitted to the DEQ Piedmont Regional Office by no later than 270 days prior to expiration of this permit.

D. §316(b) PHASE II CONDITIONS

1. Interim §316(b) Best Technology Available (BTA)
The permittee shall implement interim Best Technology Available (BTA) measures to minimize impingement and entrainment (I&E) mortality and adverse impacts. Each operating cooling water intake structure (CWIS) shall utilize a curtain wall, traveling screens, spray wash systems and debris return.

2. Impingement and Entrainment Control Technology Preventative Maintenance

The Operations and Maintenance (O&M) Manual for the permitted facility shall include a description of procedures and a regular schedule for preventative maintenance of all I&E control technologies and measures. In addition, the O&M Manual shall include a description of mitigation protocols and practices to implement should a water withdrawal event occur while an I&E technology or measure is off-line. The O&M Manual shall be updated to incorporate the information required by this condition by no later than 90 days following the effective date of this permit. All I&E control technologies and measures shall be maintained in effective operating condition. The permittee shall maintain documentation of maintenance and repairs of I&E control technologies and measures, including, but not limited to: the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, and date(s) the control technologies returned to full function.

3. Alternate Schedule for Submittal of 40 CFR §122.21(r) Information
The permittee shall, by no later than 270 days prior to the expiration date of this permit, submit to the DEQ Regional Office all applicable information described in 40CFR §122.21(r).

4. Monitoring Requirements
The permittee shall conduct visual inspections or employ remote monitoring devices during the period any cooling water intake structure is in operation. Inspections shall be conducted no less frequently than weekly to ensure that any technologies operated to comply with impingement mortality and entrainment requirements, any additional measures necessary to protect listed threatened and endangered species and designated critical habitat, and other standards for minimizing adverse environmental impact as established in this permit, are maintained and operated to function as designed.

Inspection documentation shall include at a minimum:

a. Date, time, and location of the inspection or remote monitoring period;

b. The name(s) and signature(s) of the inspector(s);

c. A description of water withdrawal volumes or rates occurring at the time of the inspection;

d. Where available, head loss across the intake screen(s);

e. If adverse weather conditions exist, a description of the adverse weather conditions;

f. Any technologies needing maintenance, repair, or replacement.

The requirement to conduct visual or remote inspections is waived when no water is withdrawn through all cooling water intake structures during an entire inspection period. For each cooling water intake structure, the permittee shall document the date(s) when no water is withdrawn through the respective intake structure.

When adverse weather conditions prevent visual inspections or remote monitoring from being safely conducted during a given inspection period, the visual inspection or remote monitoring requirements may be waived provided the permittee prepares documentation explaining the reasons why a visual

inspection or remote monitoring could not be safely conducted. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such events as local flooding, high winds, electrical storms, or situations that otherwise make an inspection impracticable, such as drought or extended frozen conditions.

Any deficiencies found during a visual inspection or remote monitoring event shall be corrected as soon as possible, but no later than 30 days following discovery, unless permission for a later date is granted by DEQ in writing.

All documentation relating to visual inspections or remote monitoring, or the inability to safely conduct such monitoring due to adverse weather conditions, shall be signed and certified in accordance with Part II.K of this permit and shall be made available to DEQ personnel for review during facility inspections or no later than 30 days following receipt of a request by DEQ.

5. Annual Certification Statement Requirements

The permittee shall annually prepare a written statement certifying either: a) operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure have been substantially modified, or b) no substantial changes have occurred in the operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure.

If substantially modified operations have occurred, the permittee must provide with the annual certification statement a summary of those changes. In addition, the permittee must submit revisions to the information required at 40 CFR §122.21(r) with the next application for reissuance of this permit.

Certification statements shall be signed in accordance with Part II.K of this permit and submitted to the DEQ Piedmont Regional Office by no later than each February 10 for the period covering the preceding calendar year.

6. Measures to protect Federally-listed Threatened or Endangered (T&E) species, designated critical habitat, and fragile species or shellfish

The permittee shall operate each cooling water intake structure and cooling system in a manner designed to minimize incidental take, reduce or remove more than minor detrimental effects to Federally-listed threatened, endangered, or fragile species and designated critical habitat, including prey base.

The permittee shall prepare, on a calendar year basis, a report providing an assessment of the efficiency/effectiveness of the facility's control measures. The report shall include a compilation of all federally-listed threatened or endangered species found to have been taken by a cooling water intake structure during the reporting year. For each federally-listed species taken, the report shall include the following data at a minimum:

- Species name (to include both the Latin and common name);
- Federal listed status (e.g., threatened, endangered, or other);
- Total number of organisms taken by life stage cycle (egg, larva, juvenile, adult);
- Method of take (impingement, entrainment, or other);
- Results of the take (death, injury, or other); and
- The take estimated by the federal Fishery Services when a federal incidental take authorization was granted.

The assessments and compiled data shall be submitted to the DEQ-Regional Office by no later than each February 10 for the preceding calendar year.

7. Federal Endangered Species Act Compliance

Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

Part II. CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.

   a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

   b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

   c. Samples taken shall be analyzed by a laboratory certified under 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.

3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual(s) who performed the sampling or measurements;

   c. The date(s) and time(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060-6296

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.

3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

2. Otherwise alter the physical, chemical, or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed.

The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
   a. Any unanticipated bypass; and
   b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
   c. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

   The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.
3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II.G, H, and I may be made to the Department's Regional Office at (804) 527-5020 (voice), (804) 527-5106 (fax) or online (http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx**). For reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), leave a message and this shall fulfill the immediate reporting requirement.**

For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

      (1) After promulgation of standards of performance under Section 306 of the Clean Water Act which are applicable to such source; or

      (2) After proposal of standards of performance in accordance with Section 306 of the Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:

   a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

   b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

   c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Part II.K.1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any

other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2 and U.3.

2. Notice

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.

   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass

   a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II.U.2.

b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required in Part II.I; and

   d. The permittee complied with any remedial measures required under Part II.S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;

   b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

   c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT A for Outfall 301
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:
http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	REPORTING RESULTS(2)	SAMPLE TYPE(3)	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, dissolved	(4)	1.4		G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(4)	1.0		G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(4)	0.3		G or C	1/5 YR
16065-83-1	Chromium III, dissolved (7)	(4)	3.6		G or C	1/5 YR
18540-29-9	Chromium VI, dissolved (7)	(4)	1.6		G or C	1/5 YR
7440-50-8	Copper, dissolved	(4)	0.50		G or C	1/5 YR
7439-92-1	Lead, dissolved	(4)	0.50		G or C	1/5 YR
7439-97-6	Mercury, dissolved	(4)	1.0		G or C	1/5 YR
7440-02-0	Nickel, dissolved	(4)	0.94		G or C	1/5 YR
7782-49-2	Selenium, Total Recoverable	(4)	2.0		G or C	1/5 YR (FW)
7440-22-4	Silver, dissolved	(4)	0.20		G or C	1/5 YR
7440-28-0	Thallium, dissolved	(4)	(5)		G or C	1/5 YR
7440-66-6	Zinc, dissolved	(4)	3.6		G or C	1/5 YR
PESTICIDES/PCBs						
309-00-2	Aldrin	608/625	0.05		G or C	1/5 YR
57-74-9	Chlordane	608/625	0.2		G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	622	(5)		G or C	1/5 YR
72-54-8	DDD	608/625	0.1		G or C	1/5 YR
72-55-9	DDE	608/625	0.1		G or C	1/5 YR
50-29-3	DDT	608/625	0.1		G or C	1/5 YR
8065-48-3	Demeton (synonym = Dementon-O,S)	622	(5)		G or C	1/5 YR
333-41-5	Diazinon	622	(5)		G or C	1/5 YR
60-57-1	Dieldrin	608/625	0.1		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS[2]	SAMPLE TYPE[3]	SAMPLE FREQUENCY
959-98-8	Alpha-Endosulfan (synonym = Endosulfan I)	608/625	0.1		G or C	1/5 YR
33213-65-9	Beta-Endosulfan (synonym = Endosulfan II)	608/625	0.1		G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608/625	0.1		G or C	1/5 YR
72-20-8	Endrin	608/625	0.1		G or C	1/5 YR
7421-93-4	Endrin Aldehyde	608/625	(5)		G or C	1/5 YR
86-50-0	Guthion (synonym = Azinphos Methyl)	622	(5)		G or C	1/5 YR
76-44-8	Heptachlor	608/625	0.05		G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	608/625	(5)		G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608/625	(5)		G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608/625	(5)		G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC (syn. = Lindane)	608/625	(5)		G or C	1/5 YR
143-50-0	Kepone	8081 Extended/ 8270C/8270D	(5)		G or C	1/5 YR
121-75-5	Malathion	614	(5)		G or C	1/5 YR
72-43-5	Methoxychlor	608.2	(5)		G or C	1/5 YR
2385-85-5	Mirex	8081 Extended/ 8270C/8270D	(5)		G or C	1/5 YR
56-38-2	Parathion (synonym = Parathion Ethyl)	614	(5)		G or C	1/5 YR
1336-36-3	PCB, total	608/625	7.0		G or C	1/5 YR
8001-35-2	Toxaphene	608/625	5.0		G or C	1/5 YR
BASE NEUTRAL EXTRACTABLES						
83-32-9	Acenaphthene	610/625	10.0		G or C	1/5 YR
120-12-7	Anthracene	610/625	10.0		G or C	1/5 YR
92-87-5	Benzidine	625	(5)		G or C	1/5 YR
56-55-3	Benzo (a) anthracene	610/625	10.0		G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	610/625	10.0		G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	610/625	10.0		G or C	1/5 YR
50-32-8	Benzo (a) pyrene	610/625	10.0		G or C	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	625	(5)		G or C	1/5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	625	(5)		G or C	1/5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0		G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		G or C	1/5 YR
91-58-7	2-Chloronaphthalene	625	(5)		G or C	1/5 YR
218-01-9	Chrysene	610/625	10.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS[2]	SAMPLE TYPE[3]	SAMPLE FREQUENCY
53-70-3	Dibenzo (a,h) anthracene	610/625	20.0		G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
91-94-1	3,3-Dichlorobenzidine	625	(5)		G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0		G or C	1/5 YR
131-11-3	Dimethyl phthalate	625	(5)		G or C	1/5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0		G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	625/ 8270C/8270D	(5)		G or C	1/5 YR
206-44-0	Fluoranthene	610/625	10.0		G or C	1/5 YR
86-73-7	Fluorene	610/625	10.0		G or C	1/5 YR
118-74-1	Hexachlorobenzene	625	(5)		G or C	1/5 YR
87-68-3	Hexachlorobutadiene	625	(5)		G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	625	(5)		G or C	1/5 YR
67-72-1	Hexachloroethane	625	(5)		G or C	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	610/625	20.0		G or C	1/5 YR
78-59-1	Isophorone	625	10.0		G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0		G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	625	(5)		G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	(5)		G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	625	(5)		G or C	1/5 YR
129-00-0	Pyrene	610/625	10.0		G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		G or C	1/5 YR
	VOLATILES					
107-02-8	Acrolein	624	(5)		G	1/5 YR
107-13-1	Acrylonitrile	624	(5)		G	1/5 YR
71-43-2	Benzene	602/624	10.0		G	1/5 YR
75-25-2	Bromoform	624	10.0		G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	1/5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	602/624	50.0		G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0		G	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS[2]	SAMPLE TYPE[3]	SAMPLE FREQUENCY
67-66-3	Chloroform	624	10.0		G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	624	(5)		G	1/5 YR
78-87-5	1,2-Dichloropropane	624	(5)		G	1/5 YR
542-75-6	1,3-Dichloropropene	624	(5)		G	1/5 YR
100-41-4	Ethylbenzene	602/624	10.0		G	1/5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	(5)		G	1/5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0		G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	(5)		G	1/5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10.0		G	1/5 YR
10-88-3	Toluene	602/624	10.0		G	1/5 YR
79-00-5	1,1,2-Trichloroethane	624	(5)		G	1/5 YR
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0		G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0		G	1/5 YR
ACID EXTRACTABLES						
95-57-8	2-Chlorophenol	625	10.0		G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	625	(5)		G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	625	(5)		G or C	1/5 YR
25154-52-3	Nonylphenol	ASTM D 7065-06	(5)		G or C	1/5 YR
87-86-5	Pentachlorophenol	625	50.0		G or C	1/5 YR
108-95-2	Phenol	625	10.0		G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		G or C	1/5 YR
MISCELLANEOUS						
776-41-7	Ammonia as NH3-N	350.1	200		C	1/5 YR
16887-00-6	Chloride	(4)	(5)		C	1/5 YR (FW and PWS)
7782-50-5	Chlorine, Total Residual	(4)	100		G	1/5 YR
57-12-5	Cyanide, Free [9]	ASTM 4282-02	10.0		G	1/5 YR
N/A	*E. coli* / *Enterococcus* (N/CML)	(4)	(5)		G	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	REPORTING RESULTS(2)	SAMPLE TYPE(3)	SAMPLE FREQUENCY
18496-25-8	Sulfide, dissolved (8)	SM 4500 S^2 B	100		G or C	1/5 YR
60-10-5	Tributyltin	(6)	(5)		G or C	1/5 YR
471-34-1	Hardness (mg/L as $CaCO_3$)	(4)	(5)		G or C	1/5 YR (FW & TZs)

_____

Name of Principal Executive Officer or Authorized Agent & Title

_____

Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

(2) If the reporting result is greater than or equal to the QL, then include the reporting result. If the reporting result is less than the QL, then report "< [lab QL]". For example, if the reporting result is below the QL with a QL of 25 micrograms/liter, then report "<25".

(3) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour **(PW - Revise as required to require same composite duration as BOD_5)** composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(4) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.

(5) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

(6) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).

(7) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL

listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(8) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(9) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].